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'VALUE-FREE KNOWLEDGE' - MYTH OR NORM?

It is now fashionable, even in some Christian circles, to imagine that the aim of science is no longer to seek objective knowledge. All scientific knowledge is held to be 'value-laden', and the concept of value-free knowledge a 'myth'. Professor MacKay traces the fashion to the influence of social scientists who, as people, study other people, and so have special difficulty in avoiding value-bias in their work. Belief in God as Creator, he argues, validates the concept of objective knowledge of the creation.

The modern scientific enterprise grew up in an atmosphere not merely favourable to biblical religion but in large measure generated by it¹. God had written the Book of Nature; it was man's part to read it - humbly, observantly and obediently - and to do his best to apprehend it correctly. Although the founders of modern science were under no illusions as to the limitations, both instrumental and conceptual, that would hinder them in this task, their goal, however imperfectly achievable, was definite and objective. If the enterprise was conducted under the eye of the Author, then for Him at least there could be no doubts about the correctness or otherwise of any resulting claims to knowledge on man's part. The honest scientist schooled himself to distinguish between the way things *are* and the way he would have *liked* them to be: he sought to guard against the danger of letting his values and preferences distort his reading of the facts. Though realising that his aim was imperfectly achievable, he would have counted it a shame in the sight of God to be found negligent in seeking to achieve it.

It is symptomatic of the practical atheism of our day that this early emphasis on the ideal of objective, value-free knowledge - on the existence of facts that must be reckoned with

whether we like them or not — has found itself increasingly under attack. Once the Author has been removed from the scene, who is to say whether the Book of Nature is being accurately read? If nobody can say — why not dismiss the concept of value-free knowledge altogether, as an exploded myth? Perhaps through a misconception of the work of Thomas Kuhn², it has recently been fashionable to assert that even in natural science there are no significant matters of 'straight scientific fact', and to write off those who disagree as naive.

From a certain type of unbeliever, this dismissal of objectivity as an ideal is at least consistent. What is more startling — and more disturbing — is to find something very like it echoed increasingly nowadays by people who profess Christian beliefs, especially those in the social sciences³. The fact that a whole conference of Christian university staff was recently convened to discuss "The Myth of Value-Free Knowledge" makes me wonder whether even some evangelical believers have been seduced into giving it credence. In case any readers of *Faith & Thought* are among them, let me try to sow some seeds of legitimate doubt in their minds. I want to argue that Christians should strongly oppose the fashionable rejection of the ideal of value-free knowledge, because except in a few special cases (see below), that rejection is both illogical and inherently incompatible with the theistic Christian position.

That total rejection of the ideal of value-free knowledge is illogical (i.e. does not follow from its premises) hardly needs demonstration. The alleged grounds for it are that the values of the scientist (and of his social background) inescapably bias his selection of data and colour his reading of those he selects. Thus even if he takes value-free objectivity as his aim (so the argument runs), his performance must fall so far short as to make the whole concept meaningless.

To be sure, any idea that the *practice* of science can be value-neutral is nonsensical: our decisions whether, when and at what cost to lift the lid of Pandora's box or to publish what we see when we peer inside are as value-laden as human judgments can be. But for the working scientist in, say, chemistry, physics or engineering, the plea that he should on these grounds abandon his ideal of value-free knowledge as a 'myth' is a monstrous *non sequitur*.

A scientist's values, as well as the prevalent thought-forms of his society, doubtless shape the *questions* he asks: and he knows how tentative and imperfect are his *formulations* of the knowledge he gains, as he seeks to answer these questions⁴. But by no stretch of logical canons can this justify the conclusion that the concept of value-free knowledge is a myth. After all, the scientist has daily experience of any number of aims that are

imperfectly achievable (e.g. the maintenance of mechanical or thermodynamic equilibrium, or the establishment of the structure of a gene) without being robbed *ipso facto* of their definite and objective meaning. What is more to the point, he faces the growing mound of evidence that in pursuing science, he and his colleagues are accumulating knowledge than can be *relied upon* within stated margins of imprecision. He is convinced that such knowledge refines itself by repeated test, and stands to be reckoned with by anyone (whatever his values or ideology) who ventures into the relevant territory. For him to pretend otherwise would be irresponsible tomfoolery⁵.

Why then has such a counterintuitive thesis gained so much currency? The main reason, I think, becomes clear from the concerns of those who propagate it. Almost all the pressure to decay the ideal of value-free knowledge comes from students of human nature and human society. They, too, would like to be called 'scientists'; but in their particular line of investigation there are (at least) three epistemological snags which have no parallel in the classical sciences. (a) They are people investigating *people*. Their own interests and values and presuppositions — their own idea of what it is like or ought to be like to be a person or a society — inescapably colour not only what strikes them as worthy of investigation in the human situation facing them, but also what they perceive in it. Framing a questionnaire, for example, is seldom if ever a neutral activity. (b) Asking questions is not a neutral activity either: it puts ideas into people's heads, or reshapes the ideas already there, so that 'value-free questioning' is virtually impossible. (c) Above all, the promulgation of findings (especially descriptions of current attitudes and trends) among the people investigated will in general *affect their accuracy*: it can be either self-fulfilling or self-stultifying⁶.

In general, offering people a picture of themselves, especially if it purports to be a prediction of their actions, is not so much informative as *manipulative*⁷. Like the cry of the back-seat passenger to the driver: "You'll be in the ditch in a minute", such communications function more like *advice*: "Consider how you would like it if things turned out this way". Neither the questions and statements of the social scientist, nor his decisions as to whether or when or to whom to present them, could pretend in general to be 'value-free'.

In face of such embarrassing considerations for a discipline claiming the name of a 'science', it is understandable that some social scientists have passed from the admission that *they* cannot offer value-free knowledge, to the suggestion that no other discipline can do so; and from that to the aggressive dismissal of the whole idea of value-free knowledge as a 'myth'. But this will not do. What follows logically from the predicament of the social scientist is not that value-free knowledge in general is a

myth, but only that certain ways of investigating *human beings* do not easily (if at all) yield value-free knowledge (though they may yield power); and that certain statements made to human beings about themselves, and especially about their future, *do not impart knowledge*, except in a conditional form which they themselves can (and often must) play a part in making true or false. Limiting though this may be for those of us whose calling is to study people, whether as objects or as subjects, it gives no reason whatever for throwing doubts on the validity of the concept of value-free knowledge in general. To do so merely invites the reaction we feel towards Aesop's fox who lost his tail! The clean and honest way to cope with the situation is surely to use a distinguishing term (other than 'knowledge') for what people say to one another about each other (on whatever basis) that is *not* value-free. (An engineer would call it 'Feedback'.) Warning? Exhortation? Image-Building? Brain-washing? Encouragement? Discouragement? Inflammation? It could be any or all of these and more. Perhaps the most general term would be 'Assessment' or 'Appreciation'⁸. To receive such communications about ourselves may in a sense be informative; but it does not confront us with the 'take-it-or-leave-it' claim to our assent which is the hallmark of objective knowledge.

Admittedly if this distinction were recognised it might raise some further interesting questions. On what basis ought people to be selected and licensed to exercise such manipulative functions under the guise of imparters of 'knowledge'? By what criteria ought *they* to be valued for doing so? Under what conditions, for example, and by whom, should they expect to be *paid* for purveying their own particular values in this capacity? But I digress

Someone may be inclined to object that if all our methods of trying to acquire or impart knowledge of human beings are value-biased, this does seem to make the notion of value-free knowledge empty at least in the social sciences. I am aware (as an outsider) that this is a matter of hot dispute among contemporary sociologists. Weber's early ideal of objectivity in social science finds few defenders among today's *avant-garde*. Mannheim's hope that an academic 'intelligentsia' could serve as impartial bridge-builders between the sociological 'outsider's view' and the intrinsic 'participants' view has not been realised. As seen by Alvin Gouldner, for example, "the fate of objectivity in sociology is linked with, and its fortunes vary with, the changing hopes for a peace-bringing human unity". Early-nineteenth century Positivism, he argues, "set itself the task of creating both an objective social science and a new religion of humanity, each informing the other and aimed at re-uniting society". In Gouldner's view "the conception of objectivity has commonly projected an image of the scientist as linked to a higher realm, as possessed of a godlike penetration into things, as serenely above human frailties and distorting passions, or as possessed of a priest-like impartiality"⁹.

I need hardly say that this humanistic image of the scientist is the reverse of that which should inspire the Christian social scientist to retain the concept of value-free knowledge. In biblical perspective the scientist is not a god but a humble steward, answerable to the Giver of his data for the accuracy with which he reads them. He is thankful that, despite his human frailties and distorting passions, it has proved possible to establish a vast and ever-growing structure of solid facts about people — in medicine, physiology, psychology, and even such subjects as economics and social dynamics — which people themselves must accept and reckon with whether they like them or not. But the central point for the Christian, which makes nonsense of the anti-objectivist case, is that where *he* may find it difficult or impossible to arrive at a value-free description of a human situation, he is under the judgment of One who *knows* the way things are, for it is He who created them and now holds them in being, just as they are. Thus whatever the human scientist may think about Joe Bloggs, he is in the unseen presence of One who *knows* whether he is correct or not to think as he does about Joe. If he enters into dialogue with Joe, and so becomes one system with him, he will doubtless forfeit thereby the possibility of gaining the predictive knowledge of Joe that a non-participant may have⁷. But whatever the limitations and relativities of his own view, still behind all, and Giver of being to all, there is God, who knows just what it is that the scientist-in-dialogue would be correct to believe about Joe¹⁰. It should be added that there may be vastly important generalisations to learn and understand about a society as a system, which individual members of any society could be correct to accept as objective fact without invalidating them. I am thus far from agreeing with the notion that it is impossible to study society scientifically. On the contrary, once the present defeatist fashion has passed, I look forward to the growth of a science of society in all its facets, which will be increasingly rewarding in the accumulation of solid knowledge.

If the Creator's knowledge constitutes a conceptual criterion of objectivity even in the special case of human science, it does so *a fortiori* in the general domain of scientific investigation. No doubt personal limitations and prejudices and cultural thought-forms can even, in theory, bias and distort our scientific descriptions of physical reality. There is no guarantee, even in physics, that what we *claim* to know about our world is ever totally value-free. The folly of taking refuge from objectivity in such theoretical admissions, however, is shown by the solid day-by-day reliability of physical science as a guide to our expectations; and even where they have practical import, the inference is not that *knowledge* is never value-free, but only that what we *claim* to know is liable to be a blend of truth and error, knowledge and prejudice or wishful thinking. And again the Creator is the all-knowing arbiter of the extent to which what we claim to know really *is* knowledge.

Why is this so important? Because at its root, as I see it, is the age-old question: Who is to be master? The ideal of value-free knowledge is the representation of what the Creator has provided for me to reckon with, as it is, whether I like it or not. There are admittedly some aspects of the future which it is up to me to determine, and about which there exists no value-free knowledge-for-me¹¹. (There cannot be take-it-or-leave-it knowledge-for-you of a situation which logically depends on whether you 'take it' or 'leave it'!) But for the rest, my highest ambition must be to know and to do full justice to the objective facts as God knows them, and so render to Him as their Giver my whole-hearted obedience.

Summary and Conclusion

The main argument of this paper has been that whatever our admitted epistemic difficulties is disentangling fact from interpretation and evaluation, especially in the human sciences, nobody who takes seriously the concept of God as the all-knowing Creator can rationally dismiss the concept of value-free knowledge as a myth. Such a Creator is the ever-present arbiter of the distinctions between factual knowledge (that which stands to be reckoned with, whatever one's values) and the whole spectrum of value-loaded beliefs, opinions and assessments that we form (and properly form) as participants in the flux of human history. Where what passes for the "communication of knowledge" is admittedly value-laden, it would seem better to identify it as such by a distinguishing label (such as 'assessment' or 'appreciation') than to rob the term 'knowledge' of its objective connotation.

In these terms we have noted that the concept of 'knowledge about our future' is an important special case. There must in general be some objective facts-for-non-participants about our future (whether or not anyone knows them) which are not objective facts-for-us, because it is our thinking and choosing that will determine what form they will take. In that sense what we think about our own future is (for us) inescapably 'value-bound'. It is ramifications of this logical dilemma that make it impossible completely to divorce facts from values in social sciences, though without in any way eliminating the need in general for the concept of value-free knowledge.

Finally, it is important to distinguish the Christian motive for retaining the concept of objective knowledge from the motive of unbelieving humanism. Christians who believe that objectivity is a duty to the Creator, before whom the scientist is under judgment, have no need of the scientificistic *hubris* of Positivism to back up their emphasis; nor would it make sense for them to abandon objectivity for fear of being tarred with the same brush. Instead, I suggest that the current debate offers a splendid opportunity for the academic Christian to show what it means for him professionally

to believe that "all things are naked and opened to the eyes of Him with whom we have to do": that for us value-free knowledge is no myth, but a norm which, like righteousness in the domain of the spirit, is no less meaningful and normative for being imperfectly attainable¹².

NOTES

- 1 See Charles Webster, *The Great Instauration*, 1975; also R. Hooykaas, *Religion and the Rise of Modern Science*, 1972. By the time that the social sciences reached self-consciousness, of course, the religious climate had changed; but the same theological principle is equally applicable to them.
- 2 Thomas Kuhn, *The Structure of Scientific Revolutions*, Chicago, 1961.
- 3 See for example the review of my book "Human Science and Human Dignity" by N. Isbister with D. Lyon in this JOURNAL, 1979, 106, 178-183. In this connection (*idem*, p. 180) note that observationally established disparities between objective accounts at the same level of explanation would create a problem only if each account were defined from the same stand-point. Otherwise (as with the left- and right-eye views of a 3-dimensional scene) they are simply complementary; and the disparities actually provide objective information about the dimensionality of the structure being observed. See D.M. MacKay, "What makes a contradiction?", this JOURNAL, 1968 97, 7-14.
- 4 Our present theoretical picture of the structure of matter, for example, embodies concepts such as "the electron" with a status much open to dispute, however reliable the predictions we have learned to base upon it.
- 5 Christians in particular must be careful not to exaggerate the degree of uncertainty introduced by the recent revolution in theoretical physics, to which Dr. Lloyd-Jones draws attention on p. 13 of his booklet "The Approach to Truth: Scientific & Religious" (Tyndale, 1963). If the data faced by the scientist are indeed *God's* data to us, then radical scepticism as to their implications can have in it an element of wilful *disobedience* - a refusal to reach (however tentatively) the conclusions demanded by what He has given us.
- 6 H.A. Simon, "'Bandwagon' and 'Underdog' Effects", *Public Opinion Quarterly*, 1954, 245-253; D.M. MacKay, "Man as Observer-Predictor". In: *Man in his Relationships* (H. Westmann, ed.), 1955, 15-28.
- 7 I have explored the implications of this point at greater length in (a) "Machines and Societies" in: *Man and His Future* (G. Wolstenholme, ed.), 1963, 153-167; (b) "Scientific Beliefs about Oneself" in *The Proper Study* (G.N.A. Vesey, ed.), Royal Institute of Philosophy Lectures, 1971, 4, 48-63; (c) "Information Technology and the Manipulability of Man", *Study*

Encounter, 1969, 5(1), 17-25; (d) Chapter 3 of *Human Science and Human Dignity*, Hodder & Stoughton, 1979.

- 8 A specially illuminating treatment of this theme is given by Sir Geoffrey Vickers in *The Art of Judgment*, 1965.
- 9 A.W. Gouldner, *For Sociology*, Pelican, 1975, p. 66. It is important not to confuse the question of objectivity in science with that of the *ethical neutrality of scientists*, which Gouldner also addresses. "If technical competence provides no warrant for making value judgments", he asks on p. 5, "then what does?". A Christian would reply that technical competence is not enough; but that the more we (objectively) know, the more accountable we are for the use we make of that knowledge in our judgments of value. Objectivity is not an *alternative* to an ethical attitude on the part of the scientist, but rather one of its preconditions.
- 10 Note that this does *not* necessarily mean that *what God knows* is what either the scientist or Joe would be correct to believe if only they knew it; for one of the things God knows is that they do not know it!
- 11 D.M. Mackay, *Science, Chance & Providence*, Oxford, 1978, Chapter III; *Brains, Machines & Persons*, 1980, pp. 86-97.
- 12 Note that the impossibility of perfection does *not* imply (in either case) that the ideal is unattainable in particular instances. Sinful men can, and often do, perform righteous acts (e.g. speak truthfully); and value-driven scientists can, and often do, gain value-free knowledge (e.g. make objective measurements).